

Original Research Article

Assessing impact of anti tobacco mass media campaignsBhargava S.S¹, Bhowate R.R²¹BDS, MDS , PhD Scholar, Assistant Professor , Department of Oral Medicine and Radiology , VSPM Dental College and Research Centre, Hingna Nagpur 19²Professor, PhD supervisor and Head, Department of Oral Medicine and Radiology, SPDC Dental College , Sawangi (Meghe) Wardha***Corresponding Author:**

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Abstract: For considerable time now, mass media sources have been used for advocating tobacco cessation. Responses from 1010 tobacco users were studied to determine impact of mass media campaigns on the tobacco using population and to identify challenges in effectual implementation of these media campaigns. To analyse the impact of anti tobacco media campaigns on tobacco users. 1010 self reported tobacco users were interviewed to determine if their knowledge, attitude and practices of tobacco consumption were influenced by anti tobacco media mass messages. 646 male and 364 females; between 16-75 years with mean age of 32.84 ± 12.2 years participated in the study. 910 (90 %) of participants were unaware about the harmful effects of tobacco at the time of habit initiation, however, 890 (88.11%) participants said that they had gradually become aware of the disadvantages of tobacco use. Majority of participants credited media sources for their awareness but remarked that these campaigns were not helpful beyond creating awareness. A suboptimal outcome was noticed in dissuading tobacco use through media campaigns. Anti tobacco media campaigns have greatly contributed in creating awareness about harmful effects of tobacco; though they have made only a modest impact in prompting tobacco cessation.

Keywords: mass media, Anti tobacco , media campaigns

INTRODUCTION

The term mass media comprises of diversified collection of resources, disseminating a wide variety of information. In last few decades there has been notable expansion of media beyond traditional avenues of print, audio, video to the newer means such as internet, social networking, blogs and interactive gaming etc.

Various studies state that exposures to tobacco use particularly smoking in movies is a major contributing factor in the initiation of tobacco habit among the adolescents and often misleads the population about possible adverse effects of tobacco. Similar consequences have also been documented for advertising, product placement and promotional campaigns by tobacco companies. In view of this WHO and countries all over the world have implemented several laws and legislations curtailing the tobacco promotion, instead anti- tobacco warning, advertising and media campaigns to counteract tobacco promotion have been initiated.

Public communication mass media campaigns are widely used and relied upon to improve awareness, disseminate knowledge and understanding of an issue

among the population. Such programs attempt to influence and improve individual and societal behaviour and contribute to a positive change. The evidence from literature indicates, however, that many community-based programs have had only modest impact, with the notable exception some programs eg. HIV prevention programs [1.] Chief reasons for poor performance of such community-based prevention programs are methodological challenges, inaccurate evaluation of public perception and response, concurrent trends, limitations of the interventions suggested and limitations of theories used during campaign planning. The effectiveness of HIV programs appears to be related in part to extensive formative research and an emphasis on changing social norms [1]. Vigilant monitoring of implementation and outcomes of such campaigns is must to ensure their efficiency and to guarantee their contribution to targeted public health outcome.

India presents an ideal scenario to study effects of anti tobacco media campaign as it has one of the largest number - almost 275 million of tobacco users [2] , it harbours one of the leading entertainment (chiefly film) industries in the world and is also a regional

leader in initiating anti tobacco measures and regulations. This study aims to study how general population is affected by both pro and anti tobacco lobby.

MATERIALS AND METHODS

Participants

Data from two allied observational cross sectional studies conducted in Nagpur and Wardha districts of Central India was analysed to assess knowledge; attitude & practices of the tobacco users and to determine the impact of current anti tobacco media campaigns. Universal sampling was employed for a period of one year and consenting tobacco users visiting outpatient unit of Department of Oral Medicine and Radiology Sharad Pawar Dental College, Wardha and VSPM Dental College and Research Centre Nagpur were included. 1010 self-reported tobacco users with history of tobacco use for a period of more than 2 years were interviewed. Both smokers as well as smokeless tobacco product users were included however those with concurrent addictive habits such as that of alcohol and presence of any life threatening disorders were excluded from the study.

The interviews were conducted face to face. Questions were framed and validated to gather information about socio-demographic aspect, education, occupational, age and to obtain details about tobacco habit such as , reasons for initiation and continuation , duration , frequency , association with family and peer group of tobacco users, willingness for tobacco cessation, awareness about tobacco hazards, mode of information, recollection and reactions about the information provided through the mass media to ascertain if campaigns encouraged tobacco free life style.

Statistical Analysis

Data was compiled and analysed using SPSS ver. 20.0 (SPSS Inc.). The dependent variable was primarily 'willingness to quit tobacco' , other variables were knowledge of hazards, damage perception, awareness about different preparations of tobacco, ill effects of tobacco, exposure to different anti-tobacco campaigns and different media of communications. The demographic details were the independent variable. Descriptive statistics were evaluated for demographic details. Association between SES, gender, type of products used and desire to quit reaction to infomercials were tested for significance using Pearson's Chi-square test. The effect of infomercials on willingness to quit tobacco was also studied through univariate analysis. The odds ratio, as a measure of effect of different factors on willingness to quit was obtained along with corresponding 95% confidence interval. Socio economic details were determined according Kuppaswamy's Socio-Economic Status Scale 2014 revision.

RESULTS & DISCUSSION

646 male and 364 females; between 16-75 years with mean age of 32.84 ± 12.2 years participated in the study. The participants were from both rural and urban parts of Nagpur and Wardha district and adjoining districts of Vidharbha region, Maharashtra state along with participants from neighbouring state of Madhya Pradesh. (The socio economic distribution of the participants is described in Table 1). 568 (87.93%) males and 201 (55.22%) had started using tobacco during adolescence, which is similar to findings by previous studies [2-4]. 910 (90.10%) participants were unaware of the harmful effects of tobacco consumption when they started their habit, while only 54 (5.35%) had awareness but still started the habit due to peer pressure. 46 (4.55%) participants had misconceptions , of these, 24 felt that the habit can be easily given up, while 16 felt that chewable tobacco preparations have less concentration and are not harmful In due course 788 (78.02%) participants had gained awareness about ill effects of tobacco consumption. 297 (29.41%) participants were aware that even preparations containing tobacco are harmful, while 232 (22.97%) were not (Table 2) and 481 (47.62%) had various misconception about potential harmful effects from tobacco containing preparations such as smokeless preparations or tobacco in less amount is not harmful. 686 (67.65%) participants were aware that tobacco usage can have harmful effect on various organs, 671 (66.44%) were aware that tobacco use can harm the oral cavity awareness about other possible adverse effects of tobacco was relatively lesser . 883 (87.43%) participants were aware about tobacco cessation mass media campaigns, while 127 (12.57%) were not. The main source of information about harmful effects of tobacco was television i.e. 756 (74.85%) participants got information through television followed by 639 (63.27%) participants who received information from public places and 281 (27.68%) from public transport. Less than 25% received information through other sources (Table 3). 820 (81.19%) participants were not aware about cessation methods or Nicotine Replacement Therapy. Out of 1010 participants interviewed 607(60.10%) noticed the warning - smoking causes cancer, 463 (45.84%) failed to recollect any infomercials or any details from these , 330 (32.67%) noticed and recollected the advice to stop tobacco use.252 (24.95%) noticed patients images, 220 (21.78%) developed misconceptions such as only smoking is harmful or other, 49 (4.85%) noticed treatment centres and 31(3.07%) noticed that a help line number is shown in the infomercials. 651 (64.46%) participants had no reaction to infomercials, while 305 (30.2%) ignored the infomercials .Only 18 participants had temporarily discontinued tobacco under the influence of tobacco cessation warnings from various sources. 841 (83.27%) showed willingness to quit tobacco use, while 168 (16.63%) did not have inclination to cease tobacco use.

Table-1: Distribution of participants according to Socioeconomic Status

Socioeconomic background	Score*	Number of participants	Percentage
Upper	I	170	16.83
Upper middle/ Lower Middle	II	693	68.61
Upper Lower / Lower	III	147	14.55
Total		1010	100

*Kuppuswamy's Socio-Economic Status Scale 2014¹¹

Table-2: Distribution of participants according to their awareness of tobacco cessation advertising campaigns

Awareness about tobacco cessation advertising	Number of participants	Percentage
a) Yes	883	87.43
b) No	127	12.57
Total	1010	100

Table-3: Distribution of participants according to medium of information

Medium of information	Number of participants	Percentage
Print	200	19.80
TV	756	74.85
Camps	237	23.47
Hoardings	198	19.60
Movie hall	252	24.95
Public places	639	63.27
Public transport	281	27.82
Work place	219	21.68
Packaging	178	17.62
Internet	173	17.13
None	120	11.88

Participants who were aware of ill effects of tobacco consumption are more willing to quit as compared to those who are unaware of the effects, as indicated by OR of 2.193 [95% CI: 1.521 – 3.139].

The effect of different anti-tobacco messaging was evaluated on willingness to quit. The exposure to messages mentioning harmful effect of tobacco has significant effect on subject's willingness to quit. The odds ratio corresponding to watching such adds is 9.544 [95% CI: 6.354 – 14.427] as compared to those not watching the adds. The impact of medium of information was also evaluated by comparing effect with outcome. Amongst different media, public place adds shows the maximum effect (OR: 3.697; 95% CI: 2.811 – 5.646), followed by Television (OR: 2.453; 95% CI: 1.727 – 3.471), public transport (OR: 1.701; 95% CI: 1.423 – 2.598), Movie halls (OR: 1.317; 95% CI: 0.888 – 1.998) and camps (OR: 1.306; 95% CI: 0.874 – 2.000).

Mass media Intervention

Mass media interventions involve communication through television, radio, newspapers, billboards, posters, public place warning leaflets or booklets and now a day with latest internet technologies etc. Evidence shows that mass media campaigns designed to discourage tobacco use can change youth

attitudes about tobacco use, curb smoking initiation and encourage adult cessation, although studies analysing public reaction to tobacco use are rather limited.

Television was found to be chief source of information for tobacco associated awareness in similar studies conducted in the region [10]. Comprehensive tobacco control programmes which include mass media campaigns were found to be effective in changing smoking behaviour in adults. The intensity and duration of these campaigns may influence effectiveness but length of follow-up and concurrent events in the community can make this difficult to verify [5]. Exposure to advertisements (ads) to well-executed antismoking campaigns can positively and consistently change youth's beliefs and attitudes, whereas a tobacco industry-sponsored campaign can have a counterproductive influence. Exposure to advertisements (ads) to well-executed antismoking campaigns can positively and consistently change youth's beliefs and attitudes, whereas a tobacco industry-sponsored campaign can have a counterproductive influence [6]. Previous studies evidenced that mass media campaigns conducted in the context of comprehensive tobacco control programmes can promote quitting and reduce adult smoking prevalence but that campaign reach, intensity, duration and message type may influence success. Achievement

of sufficient population exposure is vital, especially for lower socioeconomic status smokers with television remaining the primary channel to effectively reach and influence adult smokers. Negative health effects messages were most effective at generating increased knowledge, beliefs or quitting behaviour [7]. The odds of buying a tobacco product can be reduced by 80% if the negative affect and emotions such elicited by the images increases [8]. The effect of these campaigns appears greater when mass media campaigns are combined with school- and/or community-based programming. Many population studies document reductions in smoking prevalence when mass media campaigns are combined with other strategies in multi component tobacco control programs [9].

Media communications play a key role in shaping attitudes toward tobacco. Mass media have also changed the environment by influencing social norms surrounding tobacco use. Tobacco media play a critical role in tobacco control, helping to counterbalance the pro-tobacco cues in the environment. Policy interventions for tobacco control have moved increasingly toward strong limitations on tobacco marketing including legislative and regulatory efforts by governmental agencies [9].

The major limitations in context of Indian anti-tobacco media campaigns observed during this study were; that though these campaigns created awareness but had a modest impact in terms of prompting cessation. The high risk population of adolescents, individuals with lower socio economic and lesser educational facilities do not find the content relatable with respect to age and socio economic background and are somewhat unaffected by the current anti-tobacco media messages; leaving them vulnerable to development of tobacco addiction and resulting consequences. Also programs and media avenues accessed by this section of population were largely devoid of anti - tobacco messages. Another major limitation cited by the population was that no information about how to attempt cessation was provided in the infomercials. Psychological dependence and withdrawal symptoms were the main challenges for a tobacco user and so was limited availability of cessation guidance. Many tobacco users suggested that these infomercials should include tips and information about making a cessation attempt.

CONCLUSION

Mass media interventions have to be credited for creating awareness among the general populace regarding the harmful effects of tobacco. These campaigns should also encourage the tobacco users to stop and to prevent initiation and maintain abstinence in non-smokers. Televised infomercials and warnings at the public place have found to be most influential among other means. However effectiveness and intensity of these messages diminishes with time and

with repetitive displays. Impact of such campaigns should be followed up and evaluated to maintain the viability of media potential harnessed via various infomercials. Proper planning and surveying the targeted population before launching campaign and follow up are essential to ensure effective use of media. An efficient media campaigns should prevent initiation, prompt cessation attempts and increase compliance with anti tobacco policies.

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